June 14, 2002

Ms. Emily Clark
Product Specialist
Velsicol Chemical Corporation
10400 West Higgins Road
Suite 600
Rosemont, Illinois 6008

Dear Ms. Clark:

The Office of Pollution and Toxics is transmitting EPA s comments on the robust summaries and test plan for triethylene glycol dibenzoate, posted on the ChemRTK HPV Challenge Program Web site on December 17, 2001. I commend Velsicol Chemical Corporation for its commitment to the HPV Challenge Program.

EPA reviews test plans and robust summaries to determine whether the reported data and test plans will provide the data necessary to adequately characterize each SIDS endpoint. On its Challenge Web site EPA has provided guidance for determining the adequacy of data and preparing test plans used to prioritize chemicals for further work.

EPA will post this letter and the attached Comments on the HPV Challenge Web site within the next few days. As noted in the comments, we ask that Velsicol Chemical Corporation advise the Agency, within 60 days of this posting on the Web site, of any modifications to its submission.

If you have any questions about this response, please contact Richard Hefter, Chief of the HPV Chemicals Branch, at 202-564-7649. Submit questions about the HPV Challenge Program through the HPV Challenge Program Web site Submit Technical Questions button or through the TSCA Assistance Information Service (TSCA Hotline) at (202) 554-1404. The TSCA Hotline can also be reached by e-mail at tsca-hotline@epa.gov.

I thank you for your submission and look forward to your continued participation in the HPV Challenge Program.

Sincerely,

/s/

Oscar Hernandez, Director
Risk Assessment Division

Attachment

cc: W. Sanders
A. Abramson
C. Auer
M. E. Weber

EPA Comments on Chemical RTK HPV Challenge Submission:
Triethylene Glycol Dibenzoate

SUMMARY OF EPA COMMENTS

The sponsor, Velsicol Chemical Corporation, submitted a Test Plan and Robust Summaries to EPA on November 23, 2001, for Triethylene glycol dibenzoate (CAS No. 120-56-9). EPA posted the submission on the ChemRTK website on December 17, 2001.

EPA has reviewed this submission and reached the following conclusions:

1. Physicochemical and Environmental Fate Data. The submitter needs to provide measured stability in water data.

2. Health Effects. Adequate existing data are available for these endpoints for the purpose of the Challenge Program.

3. Ecotoxicity. EPA considers the aquatic acute toxicity data for daphnia and algae adequate. The fish limit test is inadequate because the required test concentration was not reached.

EPA requests that the submitter advise the Agency within 60 days of any modifications to its submission.

EPA COMMENTS ON THE TRIETHYLENE GLYCOL DIBENZOATE CHALLENGE SUBMISSION

Test Plan

Chemistry (melting point, boiling point, vapor pressure, water solubility, and partition coefficient).

Adequate existing data are available for these endpoints for the purpose of the Challenge Program. The submitter, however, needs to correct its values for boiling point and freezing point.

Environmental Fate (photodegradation, stability in water, biodegradation, fugacity).

Adequate data are available for photodegradation, biodegradation, and transport and distribution for the purposes of the HPV Challenge Program.

Although estimated values for stability in water are 1.3 years (pH 7) and 48.7 days (pH 8), all the aquatic toxicity studies show substantial losses of test substance over a period of days. This information reinforces the need for the submitter to provide measured stability in water data following OECD Guideline 111. The results will also help interpret the ecological studies and design further testing as necessary.

Health Effects (acute toxicity, repeat dose toxicity, genetic toxicity, and reproductive/developmental toxicity).

Adequate existing data are available for these endpoints for the purposes of the HPV Challenge Program.

Ecotoxicity (fish, invertebrates, algae).

The endpoints for daphnia and algal toxicity have been addressed adequately. The fish toxicity study was a limit test conducted at 100 mg/L. The results indicated a 96-hour LC50 >100 mg/L using nominal concentrations. However, the study is inadequate because the measured concentrations showed that more than 80% loss of test substance occurred at the end of each 24-hour exposure period (while substantial losses also occurred in the daphnia and algal tests, it was possible to determine the EC50's in those cases). The submitter needs to redo the fish test in accordance with the guidance for testing unstable substances. More information on testing difficult chemicals such as this can be found in the

Guidance Document on Aquatic Toxicity Testing of Difficult Substances and Mixtures (OECD, June 2000 - available on the OECD website at http://www.oecd.org/ehs/test/momos.htm.

SPECIFIC COMMENTS ON ROBUST SUMMARIES

Environmental Fate (photodegradation, stability in water, biodegradation, fugacity)

The submitter reports a melting point value of 43.5-49.0 °C under the boiling point summary, and a decomposition value of >230 °C under the freezing point summary. The submitter needs to correct these errors.

Environmental Effects and Ecotoxicity Studies

EPA considers the fish acute toxicity test to be inadequate because the limit test was not done at the required measured concentration of 100 mg/L.

Followup Activity

EPA requests that the Submitter advise the Agency within 60 days of any modification to its submission.